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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/824,161	04/02/2001	Minna Hautamaki	460-010247-US(PAR)	9001

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EXAMINER

LY, ANH VU H

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 08/19/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,161

Applicant(s)

HAUTAMAKI ET AL.

Examiner

Anh-Vu H Ly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4-5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because "Fig3a" stands alone at the bottom of the page and it should be deleted. Correction is required. See MPEP § 608.01(b).
2. The disclosure is objected to because of the following informalities: section headings such as Title of The Invention, BackGround of the Invention, Brief Summary of the Invention, etc... are not presented in the specification. Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

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- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Drawings

3. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 4 and 13 are objected to because of the following informalities:
- With respect to claim 4, in line 1, "said reply message" lacks antecedent basis.
- With respect to claim 13, in line 7, "ore" should be changed to - -or- -.
- Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-4 and 9-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Forssell et al (US Patent No. 6,718,179 B1). Hereinafter, referred to as Forssell.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

With respect to claims 1, 13, and 18, Forssell discloses in Figs 4A and 5, in blocks 403 and 503, uplink and downlink TBF (UP TBF and DL TBF) are set up; RCL data transmit on packet data channels; Fig. 4A shows the direction of communication (second direction) from the MS 401 to the network 402 and Fig. 5 shows the direction of communication (first direction) from the network 501 to the MS 502 (method for transferring packets between a wireless data transfer device and a mobile communication network there are formed temporary packet flows in which data is transferred in one or more packet data traffic channels either in first direction from the mobile communication network to the wireless data transfer device or in the second direction

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from the wireless data transfer device to the mobile communication network). Forssell discloses in Fig. 4A that CV is set to 0 when no more data packets to be sent from MS 401 to the network 402 and in Fig. 5, FBI is set to 1 when no more data packets to be sent from network 501 to MS 502 (when data transfer ends in a packet flow, a notification of the end of the data transfer is added to the packet to be transmitted). Forssell discloses (col. 10, lines 18-40) that after the previous TBF between a mobile station and the network has been terminated, a timer X with a predetermined cycle is started (when the transfer of packets in the first direction has ended). The network will assign to the mobile station a limited dedicated uplink transmission resource so that the allocation is valid while the timer X is still running. Herein, a message is forwarded to the mobile station indicating of the assigned limited dedicated uplink transmission resource (at least one enquiry message is also sent from the mobile communication network to the wireless data transfer device). The mobile station will continue listening to the dedicated downlink channels that were associated to the terminated TBF. If new uplink RLC data blocks come up in the mobile station while the timer X is still running, the mobile station will use its limited dedicated uplink transmission resource to transmit a specific indication about its need to set up a continued uplink TBF (if there are packets in the wireless data transfer device to be sent to the mobile communication network, a response message to the enquiry message is sent from the wireless data transfer device, to which the wireless data transfer device sets information about the need to send packets in the response message).

With respect to claims 2 and 14, Forssell discloses in Fig. 3, that common control channels are used to signal and initiate a connection and set up uplink/downlink TBF (the

formation of temporary block flows is carried out by means of signaling information transmitted in one or more control channels).

With respect to claims 3 and 15, Forssell discloses in Figs 6 and 7, the architecture of the MS and the network includes at least RLC data block assembler and disassembler. Herein, RLC layer is part of protocol stack used in GPRS network (processing of the information to be transmitted takes place according to protocol stack, which includes at least an RLC/MAC layer).

With respect to claims 4 and 16, Forssell discloses (col. 10, lines 18-40) that the mobile station will use its limited dedicated uplink transmission resource to transmit a specific indication (in the reply message is a request message for the allocation of packet resources) about its need to set up a continued uplink TBF.

With respect to claims 9 and 17, Forssell discloses in Figs 6 and 7, the architecture of the MS and network according to GPRS system (mobile communication network is a GPRS packet switched network).

With respect to claim 10, Forssell discloses in Fig. 2, the MS has the active mode for receiving and transmitting acknowledgement and an idle model for listening as indicated by 203 (wireless data transfer device has at least an active mode and an idle mode, and if the device does not have packets to be transferred when the transfer of packets in the first direction is stopped, the wireless data transfer device is set to the idle mode).

With respect to claims 11 and 19, Forssell discloses in Fig. 5, the MS sends an acknowledgment packet with FAI in block 506 after packet transmission has stopped (when the transfer of packets has stopped, the wireless data transfer device sends an acknowledgement message to the mobile communication network). Forssell discloses (col. 10, lines 18-40) that if new uplink RLC data blocks come up in the mobile station while the timer X is still running, the mobile station will use its limited dedicated uplink transmission resource to transmit a specific indication about its need to set up a continued uplink TBF (the wireless data transfer device sets in acknowledgment message at least information about the need to send packets).

With respect to claims 12 and 20, Forssell discloses (col. 10, lines 18-40) that if new uplink RLC data blocks come up in the mobile station while the timer X is still running, the mobile station will use its limited dedicated uplink transmission resource to transmit a specific indication about its need to set up a continued uplink TBF. Herein, the specific indication includes the time information of the assigned resource (wireless device sets in acknowledgement message information about the time of transmission of the enquiry message).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being obvious over Forssell et al (US Patent No. 6,718,179 B1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

With respect to claims 5-7, Forssell discloses (col. 10, lines 18-40) that the network will assign to the mobile station a limited dedicated uplink transmission resource so that the allocation is valid while the timer X is still running. Herein, a message is forwarded to the mobile station indicating of the assigned limited dedicated uplink transmission resource. Forssell does not disclose that the last transmitted packet is used as the enquiry message or the Packet Power Control/Timing Advance message is used as the enquiry message or the Packet Uplink Assignment is used as the enquiry message. However, it is known in GPRS networks,

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that a packet header or a Packet Power Control/Timing Advance or a Packet Uplink Assignment may be used to carry any other network control information by setting specific bits in the header, etc... It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the feature of either using last data packet, packet power control/timing advance, or packet uplink assignment to carry the control information in Forssell's system, to reduce bandwidth.

With respect to claim 8, Forssell discloses (col. 10, lines 18-40) that if new uplink RLC data blocks come up in the mobile station while the timer X is still running, the mobile station will use its limited dedicated uplink transmission resource to transmit a specific indication about its need to set up a continued uplink TBF (the wireless data transfer device transmits a reply message to which the wireless data transfer device sets information about the need to transmit packets). Forssell discloses in Fig. 3, in block 305, a continuation or a follow-up is indicated while allocation of dedicated channels still valid (reply message is received in the mobile communication network and it is examined whether information about the need to transmit packets has been set in the reply message), in block 306, reconfiguration of dedicated channels are implemented (if the information about the need to transmit packets has been set, the formation of a temporary block flow from the wireless data transfer device to the mobile communication network is started), and in block 307, transmission of data packets through dedicated channels. Forssell discloses (col. 10, lines 18-40) that the network will assign to the mobile station a limited dedicated uplink transmission resource so that the allocation is valid while the timer X is still running (enquiry message is transmitted again).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pecen et al (US Patent No. 6,282,182 B1) discloses method and apparatus for simultaneous circuit switched voice and GPRS data interchange.

Vanttinen (US Patent No. 6,601,207 B1) discloses method and device for retransmitting data transfer packets.

Lintulampi et al (US Patent No. 6,711,406 B1) discloses apparatus and associated method for facilitating rapid mode changeover of a mobile station.

Chang (US Patent No. 6,532,225 B1) discloses medium access control layer for packetized wireless systems.

Forssell et al (US Pub 2004/0120253 A1) discloses method and arrangement for transferring information in a packet radio service.

Forssell et al (US Patent No. 6,671,511 B1) discloses method and arrangement for transferring information in a packet radio service.

Forssell et al (US Patent No. 6,683,860 B1) discloses method and arrangement for transferring information in a packet radio service.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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CHI PHAM
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